U.S. Serial No. 10/705,800 K. Karhu Preliminary Amendment

IN THE SPECIFICATION

Please amend paragraphs 0030, 0033, and 0042 of the specification of the above captioned patent application so they reads as follows. The amendments are to correct a typographical and minor clerical error. No new matter has been added:

[0030] In one embodiment, resonator body 1 includes recess 12 on a bottom surface. Recess 12 shifts TM-mode spurious signals toward higher frequencies but does not have much effect on the dominant TE-modes. In one embodiment, a matching recess 15 is also formed in surface 22 of enclosure 20.

In operation, filter 100 filters a signal received at input connector 4 using dual-mode resonators 102-1 and 102-2. The signal couples from tap 5 to a first frequency mode of resonator body 1 of dual-mode resonator 102-1. Coupling grooves 10 and mode tuning members 8 cause the fields of the first and second mode to turn so as to couple the first and second modes. The frequency of signals passed by dual-mode resonator 102-1 is adjusted by frequency tuning members 7.

[0042] Angled portions 712 do not affect the dominant modes because their E-field has a half circular shape in this resonator. However, angled portions 712 shift the TM_{01} -mode towards a higher frequency. This spurious TM_{01} -mode can cause problems in the filter, even though there can be other spurious modes at lower frequency. The TM_{01} is more of a problem because it has much stronger coupling than other modes.